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- EDUCATION** **Shanghai Jiao Tong University** Sep 2015 - Jun 2019
Bachelor of Engineering (Zhiyuan Honors Degree), Computer Science, ACM Honors Class
- Advisors: Prof. [Yong Yu](#) and Prof. [Xiaofeng Gao](#)
- Research Interests: Data Mining, Computer Vision, NLP, Robotics
- PUBLICATIONS** **Scribble-to-Painting Transformation with Multi-Task GANs**  
Jinning Li, Yexiang Xue
In *International Joint Conference on Artificial Intelligence (IJCAI)* 2019
Senti2Pop: Sentiment-Aware Topic Popularity Prediction on Social Media 
Jinning Li, Yirui Gao, Xiaofeng Gao, Yan Shi, Guihai Chen
In *IEEE International Conference on Data Mining (ICDM)* 2019
DancingLines: An Analytical Scheme to Depict Cross-Platform Event Popularity  
Tianxiang Gao, Weiming Bao, **Jinning Li**, X. Gao, B. Kong, Y. Tang, G. Chen, X. Li
In *International Conference on Database and Expert Systems Applications (DEXA)* 2018
- MANUSCRIPTS** **ID Preserving Face Super-Resolution Generative Adversarial Networks**
Jinning Li, Xulei Yang
Submitted to *IEEE Transactions on Information Forensics and Security*
- RESEARCH EXPERIENCE** **Machine Learning Group, Purdue University** Sep - Dec 2018
Visiting Undergraduate Research Intern
- Advisor: Prof. [Yexiang Xue](#)
- **Transform Scribbles to Oil Paintings with Multi-Task GANs.**
We introduced *Multi-Task Learning* to the settings of *Generative Adversarial Networks* to address the sparsity problem of scribbles when transforming them into artistic oil paintings. (IJCAI 2019 Published)
- Counterfactual Machine Learning Group, Cornell University** Jul - Aug 2018
Visiting Undergraduate Research Intern
- Advisor: Prof. [Thorsten Joachims](#)
- **Improve Supervised Learning on Logged Bandit Feedbacks**
Straightforward supervised learning often leads to large bias. We improved supervised methods by applying *inverse propensity weighting* to balance the bias-variance tradeoff.
- **A Hybrid Method of Counterfactual Risk Minimization and Supervised Learning.**  
Designed a hybrid loss function not only learns the feedback of logged action, but also minimizes counterfactual risk for all the candidates in a batch.
- **Ad Placement Challenge on Criteo Dataset** 
Implemented our methods to learn an ad placement policy. Our method achieved **Rank 1** in *NIPS 2017 Workshop: Criteo Ad Placement Challenge* (post-challenge).
- Data Mining Group, Advanced Network Lab, Shanghai Jiao Tong University** Jul 2017 - Jun 2019
Research Assistant
- Advisor: Prof. [Xiaofeng Gao](#)
- **Cross-Platform Event Popularity Analysis.**
Developed a scheme to quantify event popularity and analyzed the mechanisms through which an event propagates among multiple social media. (DEXA 2018 Published)

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| | <ul style="list-style-type: none"> - Sentiment-Aware Topic Popularity Prediction on Short Text based Social Media. Developed a novel neural network to estimate public sentiment and integrated it with time series analysis to improve popularity prediction. (ICDM 2019 Accepted) | |
| INDUSTRY EXPERIENCE | Automatic Driving Perception, Pony.ai Inc. <i>Algorithm Engineer</i> Jul 2019 - Present <ul style="list-style-type: none"> - Fused Road Obstacle Classification. Develop obstacle classification system to recognize cars, pedestrian, cyclists, etc with videos and 3D point cloud, helping automatic driving car recognize the environment. - Trajectory Prediction. Develop algorithm to predict the trajectory of one object with historical information. | |
| | Computer Vision Team, YITU Tech Inc. <i>Research Intern</i> Feb - Jun 2019 <ul style="list-style-type: none"> - Improve Face Recognition with Super-Resolution Algorithm. Develop a super-resolution algorithm to restore low-resolution facial images while preserving the identification, and therefore improve the face recognition task. | |
| HIGHLIGHTED COURSE PROJECTS | DeepWave: Learning to Simulate Water Wave in Real-time   CS230 <i>Virtual Reality and Interactive 3D Graphics</i> , 96/100 Jun 2018 Developed a method to learn the physical law of water-wave propagation and simulate the scene in real-time utilizing deep learning and wave packet theory. | |
| | Convolutional BiMPM for Natural Language Inference   CS229 <i>Natural Language Processing</i> , 93/100 May 2018 Proposed a novel convolutional bilateral multi-perspective matching model for natural language inference task on SNLI dataset, improving the accuracy to 86.7%. | |
| | LineArtist: A Multi-style Sketch to Painting Synthesis Scheme    CS348 <i>Computer Vision</i> , 92/100 Dec 2017 Developed a scheme to synthesize beautiful paintings with only some semantic sketches, including three procedures: <i>Sketch Image Extraction</i> , <i>Details Synthesis</i> , and <i>Style Transfer</i> . | |
| | Compiler Maple  MS208 <i>Compiler Design and Implementation</i> , Outperforms GCC -O1 May 2017 Designed and implemented a compiler from <i>Lexical Analysis</i> to <i>Register Allocation</i> with graph-coloring optimization, translating Mx* (a hybrid of C and Java) to x86 Assembly. | |
| HONORS AND AWARDS | Zhiyuan Scholarship for Overseas Visiting Study (<i>First Prize</i>). 2019 Han-Ying-Ju-Hua Scholarship. 2018 Academic Excellence Scholarship of SJTU (<i>First Prize</i>). (<i>Top 5%</i>) 2017 International Interdisciplinary Contest in Modeling (<i>Meritorious Winner</i>). (<i>Top 7%</i>) 2017 Zhiyuan Honorary Scholarship. 2016, 2017 International Mathematical Contest in Modeling (<i>Outstanding Winner</i>). (<i>Top 1%</i>) 2015 Dongrun-Yau International High School Science Award. (<i>Top 1%</i>) 2015 | |
| TEACHING EXPERIENCE | <i>Teaching Assistant</i> at MS100: Operating System Spring 2018 <i>Teaching Assistant</i> at CS122: Programming Fall 2016 | |
| PROGRAMMING PROFICIENCIES | C/C++, Java, Python (TensorFlow, PyTorch, MXNet) HTML & Javascript (D3.js), MATLAB, \LaTeX , Verilog HDL | |